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Impact of Different Exchange Rate Policies on Stock Market Performance: Kuwait vs Saudi Arabia

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Abstract

This paper examines the intricate relationship between exchange rate policies and stock market performance, focusing on Kuwait and Saudi Arabia in the Gulf region. It investigates the historical evolution of exchange rate regimes in both countries, analyzing their unique policy objectives. Using empirical analysis, the research explores the correlation between exchange rates and stock market indices, employing statistical methods and regression analysis to identify patterns. Comparative assessments reveal distinct patterns in stock market performance, shedding light on the effectiveness of different exchange rate systems in shaping economic dynamics. The findings contribute to the literature by offering insights into the nuanced relationship between exchange rate policies and stock markets, with implications for policymakers, investors, and financial analysts. By focusing on Kuwait and Saudi Arabia, two pivotal economies, the study addresses a gap in the literature, providing a comparative perspective. Policymakers can use the findings to understand the potential impact of exchange rate policies on economic indicators. Investors can leverage the conclusions to inform their decision-making, considering the nuances of exchange rate dynamics. The study finds that both countries peg their currencies to major world currencies, primarily the USD, and identifies a strong correlation between the Kuwait Stock Index and the Saudi Tasi Index.

Keywords: Exchange rate, stock market, financial performance, Kuwait, Saudi Arabia.
JEL Classification - G15 - International Financial Markets

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1.0 INTRODUCTION

Over the preceding three years, the global economy has confronted significant challenges, commencing with the advent of the Covid-19 pandemic and culminating in the recent escalation of tensions between Ukraine and Russia. These multifaceted issues have reverberated throughout the global economic landscape, primarily through disruptions in supply chains and fluctuations in energy prices. Consequently, major economies, notably the United States, have enacted monetary policies aimed at mitigating the ramifications of these challenges. Initially, to address the economic downturn induced by the pandemic in 2020, the Federal Reserve reduced interest rates to stimulate economic growth. However, after two years, in response to mounting inflation rates precipitated by the Ukraine-Russia conflict, the Federal Reserve pivoted towards a tightening monetary policy.

The repercussions of these contrasting monetary policies within a compressed timeframe present an intriguing area of investigation, particularly within the Gulf Cooperation Council (GCC) member states, for several compelling reasons. Firstly, the United States serves as a principal trade partner for both the GCC countries and other nations reliant on oil exports, given that oil transactions predominantly occur in US dollars. Secondly, there exists a divergence among GCC countries concerning their exchange rate regimes. While Kuwait opts to peg its currency to a basket of currencies, others adhere to a peg to the US dollar. This dichotomy engenders two distinct policy approaches: one closely mirroring the US monetary policy, led by Saudi Arabia, and another, uniquely observed in Kuwait.

The crux of the matter lies in the potential adverse repercussions of employing inappropriate exchange rate regimes, which could detrimentally impact the financial performance of stock markets. Although Kuwait and Saudi Arabia have not experienced inflation rates as pronounced as those in the United States, their exchange rate regimes necessitate alignment with decisions made by the Federal Reserve. Consequently, Kuwait may possess greater latitude in responding to US monetary policy tightening owing to its exchange rate regime. This contention finds support in previous research by Julian di Giovanni *et al*., (2012), which posits that high interest rates in foreign countries negatively affect economies adhering to fixed exchange rate regimes.

Furthermore, in consonance with the goods market approach propounded by Dornbusch and Fischer (1980), which posits a negative relationship between stock markets and currency exchange rates, it is anticipated that the Kuwaiti stock market will outperform its Saudi counterpart. This research endeavors to delve into the impact of these distinct exchange rate regimes on the performance of stock markets in Kuwait and Saudi Arabia. Saudi Arabia, chosen as the representative of the fixed exchange rate regime, owing to its status as the largest economy among GCC nations. The primary objective is to analyze stock market performance indicators in both countries over a specified timeframe, while identifying correlations and trends between exchange rate movements and stock market indices.

Consequently, this study holds significant implications for GCC stock markets and their economies at large. Stakeholders such as investors and regulators stand to benefit from the insights gleaned from this research. While prior work by Hassanain (2017) has touched upon the influence of differing exchange rate regimes on the stock markets of Kuwait and Saudi Arabia, we posit several advantages over their study. These include employing a distinct calculation method for the dependent variable and utilizing a sample period reflective of both tightening and lenient Federal monetary policy. As such, this paper aims to enrich the literature by delving into this underexplored area, offering valuable insights for policymakers, investors, and scholars in their future endeavors.

However, it appears that Kuwait may exhibit more flexibility in responding to the tightening monetary policy of the United States due to its exchange rate regime. This proposition aligns with the findings of Julian di Giovanni *et al*., (2012), which posit that a high interest rate imposed by a foreign country can have adverse effects on the economy of a nation adhering to a fixed exchange rate regime. Similarly, the goods market approach articulated by Dornbusch and Fischer (1980) suggests a negative relationship between stock markets and currency exchange rates. Consequently, it is anticipated that the Kuwaiti stock market will demonstrate superior performance compared to its Saudi counterpart.

The primary objective of this research is to delve into the impact of these divergent exchange rate regimes on the performance of stock markets in Kuwait and Saudi Arabia. Saudi Arabia was chosen to represent the fixed exchange rate regime to a single currency due to its status as the largest economy among Gulf countries. Accordingly, the study aims to analyze stock market performance indicators in both countries over a defined timeframe while discerning correlations and trends between exchange rate movements and stock market indices.

By scrutinizing these dynamics, the study endeavors to contribute to the existing body of knowledge on the interplay between exchange rate policies and stock market performance. Furthermore, the comparison between Kuwait and Saudi Arabia offers valuable insights into the implications of differing exchange rate regimes on financial markets within the Gulf region. Ultimately, the findings of this research have implications for policymakers, investors, and scholars seeking to understand the intricate relationship between exchange rate dynamics and stock market behavior in the context of diverse economic environments.

Thus, this paper holds significant implications for the stock markets in the Gulf Cooperation Council (GCC) region and, by extension, their respective economies. Stakeholders across the spectrum of stock market participants, including investors and regulators, stand to benefit from the insights derived from this research. As of our knowledge, Hassanain's (2017) study stands as the sole exploration of the influence of different exchange rate regimes on the stock markets of Kuwait and Saudi Arabia. However, we posit that our study presents several distinct advantages over Hassanain's work.

One notable difference lies in our approach to calculating the dependent variable, which provides a novel perspective on the relationship between exchange rate regimes and stock market performance. Additionally, our study encompasses a sample period that captures periods of both tightened and lenient Federal monetary policy, offering a comprehensive analysis of the impact of differing policy stances on stock market dynamics. Consequently, we anticipate that our research will fill a gap in the literature by shedding light on this underexplored area.

By offering fresh insights and methodological advancements, our paper seeks to contribute meaningfully to the existing body of literature. Policymakers, investors, and scholars alike stand to derive valuable insights from our findings, which can inform future research endeavors and decision-making

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processes in the realm of financial markets and macroeconomic policy. Overall, our study aims to enrich understanding of the relationship between exchange rate regimes and stock market performance, ultimately fostering more informed and effective strategies in the GCC and beyond.

1.1 Background

The intricate interplay between exchange rate policies and stock market performance has garnered significant attention from both academia and practitioners. Within the global economic landscape, various exchange rate regimes are employed by nations, each tailored to achieve specific economic objectives. Against this backdrop, the Gulf region emerges as a particularly compelling setting for investigating the ramifications of diverse exchange rate policies on stock markets. This chapter sets the stage for such an examination, outlining the rationale, significance, and focus of the research while framing subsequent analyses centered on Kuwait and Saudi Arabia.

Exchange rate policies stand as cornerstone instruments in governmental economic management strategies. The selection of a particular exchange rate regime mirrors a nation's economic priorities, encompassing fixed pegs, floating rates, or hybrid systems. The implications of these policies transcend mere currency valuation, permeating into realms such as trade balances, inflation dynamics, and overall economic equilibrium. Thus, comprehending the intricate relationship between exchange rate policies and stock market performance holds paramount importance for policymakers, investors, and financial analysts alike, as they navigate the intricacies of modern financial systems.

In delving into this discourse, this chapter paves the way for a deeper understanding of how exchange rate policies shape stock market dynamics in Kuwait and Saudi Arabia. By elucidating the rationale behind the research focus and its broader significance, this chapter lays a solid foundation for subsequent analyses that promise to yield valuable insights for stakeholders across the financial landscape.

Located at the epicenter of the Gulf Cooperation Council (GCC), Kuwait and Saudi Arabia stand as pivotal entities within the global economic landscape. Endowed with abundant oil resources, these nations have undergone rapid economic expansion and embarked on diversification endeavors, charting unique trajectories in the process. Given their strategic geopolitical positions and the intricacies of their economic policies, Kuwait and Saudi Arabia present compelling case studies for delving into the complex interplay between exchange rate policies and stock market performance.

Despite the wealth of research exploring the nexus between exchange rates and stock markets, a notable void persists in the literature, particularly concerning a comprehensive comparative analysis focused specifically on Kuwait and Saudi Arabia. The economic trajectories of these two nations, steered by distinctive exchange rate policies, offer an opportune lens through which to scrutinize the ramifications of policy variations on stock market dynamics. Therefore, the objective of this study is to bridge this gap by furnishing a nuanced understanding of the interdependencies between exchange rate policies and stock market performance within the context of Kuwait and Saudi Arabia.

By undertaking such an endeavor, this study aspires to contribute to the scholarly discourse by shedding light on previously unexplored facets of the relationship between exchange rates and stock markets in the Gulf region. Through meticulous analysis and comparative assessments, this research endeavors to elucidate the mechanisms by which exchange rate policies influence stock market dynamics in Kuwait and Saudi Arabia, thereby enriching our comprehension of the intricate interplay between monetary policy and financial markets in these vital economies.

1.2 Research Objectives

The primary objective of this research is to investigate and compare the impact of different exchange rate policies on the stock market performance of Kuwait and Saudi Arabia. Specific research objectives include:

- Scrutinizing the historical evolution of exchange rate policies in Kuwait and Saudi Arabia;
- Analyzing the stock market performance indicators in both countries over a selected timeframe;
- Identifying correlations and trends between exchange rate movements and stock market indices; and
- Offering a comparative assessment of the effectiveness of exchange rate policies in influencing economic dynamics.

1.3 Significance of the Study

This study carries substantial implications for a multitude of stakeholders across various domains. For policymakers, a deeper comprehension of how exchange rate policies intersect with stock market dynamics holds the potential to inform strategic decision-making processes, particularly concerning economic diversification initiatives and the pursuit of economic stability. Investors stand to benefit significantly from enhanced insights into the intricate relationship between currency fluctuations and stock market performance, facilitating the formulation of more robust investment strategies. Additionally, financial analysts and researchers will find value in the meticulous examination of two distinct economic paradigms within the Gulf region, offering fertile ground for scholarly inquiry and theoretical advancement.

The structure of this paper is meticulously designed to facilitate a comprehensive exploration of the research objectives delineated herein. Chapter 2 serves as a fulcrum, presenting an exhaustive literature review that synthesizes theoretical frameworks and empirical studies fundamental to the foundation of this research endeavor. In Chapter 3, the methodology employed in this study is meticulously elucidated, encompassing aspects such as data collection methodologies, variable selection, research design, and the suite of analytical tools employed. Chapters 4 and 5 serve as focal points, delving into the intricacies of exchange rate policies and stock market performance within the contexts of Kuwait and Saudi Arabia, respectively. Subsequently, Chapter 6 encapsulates the empirical findings, elucidating correlations and discernible patterns gleaned from the analytical framework. This is followed by an in-depth discussion that contextualizes the empirical findings within the broader theoretical and practical landscape. Finally, Chapter 7 serves as a nexus for concluding reflections, highlighting key insights, delineating study limitations, and proposing potential avenues for future research exploration.

2.0 LITERATURE REVIEW

The body of literature examining the ramifications of exchange rate policies on stock market performance encompasses a diverse array of theoretical constructs and empirical investigations. In the ensuing chapter, a meticulous review of extant literature is conducted, aiming to furnish a comprehensive elucidation of the intricate interplay between exchange rates and stock markets. Particular emphasis is accorded to scholarly works pertinent to the economic landscapes of Kuwait and Saudi Arabia, with the intent of elucidating the distinctive attributes that characterize these economies.

The literature review begins by delving into foundational theoretical frameworks that underpin the discourse surrounding exchange rate policies and their impacts on stock market dynamics. Various schools of thought are explored, ranging from traditional monetary theories to contemporary models that account for nuanced global economic realities. Concurrently, an examination of empirical studies provides invaluable insights into real-world manifestations of the theoretical constructs discussed. These empirical investigations span diverse methodologies, including econometric analyses, case studies, and comparative assessments, thereby enriching the discourse with empirical evidence derived from different contexts.

Of particular relevance to this study are scholarly works that specifically address the economic environments of Kuwait and Saudi Arabia. By scrutinizing these localized studies, nuanced insights emerge regarding the idiosyncratic factors that influence the relationship between exchange rate policies and stock market performance within these Gulf nations. Such insights are instrumental in elucidating the multifaceted nature of this relationship, accounting for the unique economic, geopolitical, and institutional contexts prevalent in Kuwait and Saudi Arabia.

In synthesizing the wealth of literature reviewed, this chapter serves as a foundational cornerstone for the subsequent empirical investigation, providing a robust theoretical framework and contextual backdrop against which the empirical findings are interpreted and analyzed. Moreover, by spotlighting studies relevant to Kuwait and Saudi Arabia, this review endeavors to bridge the gap between theoretical constructs and practical realities, fostering a nuanced understanding of the exchange rate-stock market nexus within the Gulf region.

2.1 Theoretical Frameworks

The Purchasing Power Parity (PPP) theory postulates the existence of a long-term equilibrium exchange rate, wherein identical baskets of goods possess identical prices when expressed in a common currency. Although short-term deviations from PPP are anticipated, the theory contends that exchange rate fluctuations should, over time, mirror disparities in inflation rates across economies. Empirical investigations into PPP frequently yield heterogeneous findings, acknowledging the inherent complexities in its real-world application, attributable to factors such as transaction costs and market imperfections (Taylor, 2002).

Asset pricing models, notably the Capital Asset Pricing Model (CAPM) and the Arbitrage Pricing Theory (APT), furnish conceptual frameworks for elucidating the influence of exchange rate movements on stock prices. The CAPM establishes a relationship between the anticipated return on an asset and its inherent risk, wherein exchange rate risk assumes a prominent role in shaping stock returns (Adler & Dumas, 1983). Building upon this foundation, the APT expands the analytical scope by incorporating multiple determinants that exert influence on asset valuations, encompassing exchange rate dynamics among its considerations.

In sum, these theoretical constructs furnish indispensable frameworks for comprehending the intricate interplay between exchange rates and stock market performance. While the PPP theory provides insights into long-term equilibrium exchange rate dynamics, asset pricing models like the CAPM and APT offer nuanced perspectives on how exchange rate fluctuations impinge upon stock prices, thereby enriching our understanding of the multifaceted relationship between currency markets and equity markets.

2.2 Empirical Studies

Numerous scholarly inquiries have scrutinized the intricate relationship between exchange rates and stock markets on a global scale. Aloui and Hkiri (2014) conducted a pivotal study revealing bidirectional causality between exchange rates and stock prices across both developed and emerging markets. Their findings underscored the significance of considering broader global economic conditions and macroeconomic variables in elucidating this intricate relationship. While insights from such studies are invaluable, a dearth of literature specifically delving into the intricacies of exchange rate policies in the Gulf Cooperation Council (GCC) region exists, highlighting the need for focused investigation.

In the Gulf region, Khan and Sen (2013) conducted seminal research probing the impact of oil prices and exchange rates on stock prices in GCC countries. Their study revealed compelling evidence of the substantial influence wielded by both oil prices and exchange rates on stock market movements within the region. However, the analysis stopped short of delving into the nuanced effects of specific exchange rate policies on these dynamics.

Historically, Kuwait has adhered to a fixed exchange rate regime, anchoring its currency, the Kuwaiti Dinar (KWD), to a basket comprising major international currencies. This policy has historically provided stability but has also rendered the economy susceptible to external shocks, particularly fluctuations in the U.S. dollar, given its significant weighting within the currency basket (Mishkin, 2000). Conversely, Saudi Arabia has maintained a fixed exchange rate regime pegged directly to the U.S. dollar, with the Saudi Riyal (SAR) firmly set at 3.75 SAR per USD. While this policy has fostered stability and predictability, concerns have arisen regarding its adaptability to evolving economic landscapes, particularly given the dollar-centric nature of global trade (Mohanty & Berger, 2013).

Despite Kuwait's significant reliance on a fixed exchange rate regime, studies specifically investigating the ramifications of different exchange rate policies on the Kuwaiti stock market are scant. Al-Musallam and Rao (2019) explored the nexus between oil prices, exchange rates, and the Kuwait Stock Exchange (KSE) index, uncovering a substantial impact of oil prices on the KSE index. However, their analysis overlooked the distinct influence of exchange rate policies on these dynamics. Similarly, in Saudi Arabia, research has predominantly focused on broader economic indicators rather than directly addressing the effects of exchange rate policies on the stock market. For instance, Algharaballi *et al*., (2019) delved into the relationship between oil prices, exchange rates, and the Saudi stock market, revealing a notable impact of oil prices and exchange rates on stock prices, yet failing to discern the specific impacts of varying exchange rate policies.

Global comparative studies provide valuable insights into the ramifications of diverse exchange rate policies on stock markets. For instance, Sarno and Taylor (2002) conducted a comprehensive analysis examining the effects of exchange rate regimes on stock market volatility. Their findings indicated that floating exchange rate regimes correlated with heightened stock market volatility, underscoring the pivotal role of regime selection in shaping market dynamics. While such global studies offer critical insights, regional comparative analyses within the Gulf Cooperation Council (GCC) region are equally crucial for grasping the intricacies of exchange rate policies.

Eita and Siami-Namini (2013) conducted a seminal study comparing the impact of exchange rate regimes on economic growth across Gulf countries. Although their focus was not exclusively on stock markets, their findings underscored the significance of exchange rate policy decisions in influencing broader economic outcomes. Despite the wealth of literature on exchange rates and stock markets globally, a noticeable gap exists concerning studies specifically delving into the effects of different exchange rate policies on the stock markets of Kuwait and Saudi Arabia.

Historically, the Central Bank of Kuwait (CBK) adhered to an exchange rate policy pegging the Kuwaiti Dinar (KD) to a weighted basket of major currencies from 1975 to 2002 (Central Bank of Kuwait). However, in 2003, Kuwait shifted to the same regime adopted by other GCC members, pegging its currency to the U.S. dollar. Nonetheless, in 2007, the CBK reverted to the previous policy due to the dollar's weakness, which resulted in the depreciation of the KD against other major trading partner currencies (Imad Moosa, 2010). This transition underscores Kuwait's primary objective of maintaining the stability of the KD against other currencies (Central Bank of Kuwait). Notably, the KD's exchange rate is pegged to an undisclosed weighted basket of international currencies representing Kuwait's major trade and financial partners. This non-disclosure aims to deter arbitrage by speculators (Imad Moosa, 2010), a point echoed by Latter (1996), who highlighted that flexible exchange rate systems discourage speculators from exploiting central banks for profit.

The exchange rate regimes of Kuwait and Saudi Arabia present intriguing juxtapositions, underscoring the divergent policy orientations of these Gulf nations. Mirza *et al*., (2013) elucidated that Saudi Arabia adheres to a fixed exchange rate regime, maintaining a steadfast linkage between its currency, the Riyal, and the U.S. dollar at SAR 3.75/USD. This policy, in place since 1986 (Alkhareif & Qualls, 2016), raises questions about the rationale behind selecting the dollar as the anchor currency over alternatives such as the Euro or Pound Sterling. Al-Hamidy and Banafe (2014) provided insights into this decision, attributing it to the dollar's prevalence in Saudi trade and its pivotal role in international financial markets. In contrast, Kuwait's experience with pegging its currency solely to the dollar was fraught with dissatisfaction, as evidenced by inflationary pressures on the Kuwaiti Dinar, as reported by the Central Bank of Kuwait. Coudert *et al*., (2011) underscored the vulnerability of pegged currencies to the behavior of their anchor currency, a concern echoed in Kuwait's monetary policy trajectory.

Despite potential drawbacks, Saudi Arabia remains steadfast in its conviction regarding the suitability of its fixed exchange rate policy, with Mirza *et al*., (2013) noting that such a regime may curtail the autonomy of Saudi monetary policy. Ilker *et al*., (2001) suggested that economies operating under a hard peg regime may exhibit diminished resilience to economic shocks. However, Mirza *et al.*, (2013) contended that Saudi Arabia's central bank, SAMA, has successfully achieved its primary objectives under this policy, including economic stabilization and planned growth.

Before delving into studies examining the relationship between stock markets and exchange rate regimes, it is imperative to grasp the intrinsic dynamics between the exchange rate variable and stock markets. The literature on this subject reveals a spectrum of perspectives and findings. According to the goods market approach introduced by Dornbusch and Fischer (1980), fluctuations in a country's currency value should inversely correlate with domestic stock prices. Conversely, the Portfolio Balance Model (PBM) posits a positive association between exchange rates and stock prices. While these frameworks have dominated discussions, contemporary research has introduced diverse viewpoints and debates, enriching the discourse on the interplay between stock markets and exchange rates.

Ajayi and Mougoue's (1996) theoretical framework posits that the relationship between stock market returns and currency values manifests differently over varying time horizons. Over the long term, a direct correlation between stock market returns and currency value becomes discernible, while a negative or inverse relationship tends to emerge in the short term. Chow *et al*., (1997) corroborated this notion, revealing that changes in the real exchange rate exert influence on stock returns over extended periods, albeit with negligible short-term effects. Conversely, Mishra (2004) acknowledges a connection between stock and currency returns but notes its inconsistency. Similarly, studies by Bahmani and Sohrabian (1992) and Nieh and Lee (2001) found no enduring correlation between stock and currency markets in their investigations of the US and G-7 countries, respectively.

When considering the impact of exchange rate regimes on stock markets, Bleaney and Francisco (2005) observed adverse effects of hard peg regimes on money growth and inflation. Furthermore, nations adhering to fixed exchange rate regimes have experienced negative repercussions from elevated foreign interest rates, leading to reductions in GDP growth (Julian di Giovanni *et al*., 2012). Conversely, flexible exchange rate regimes, as noted by Babu Rao G. Husain *et al.*, (2005), are associated with lower risks and greater financial development. Additionally, Harris Dellas (2013) highlighted that equity prices tend to exhibit greater strength under flexible exchange rate regimes.

In the context of the Gulf Cooperation Council (GCC), Hassanain (2017) stands as a seminal study exploring the relationship between stock markets and exchange rate regimes in Kuwait and Saudi Arabia. The author's findings reveal an insignificant relationship in the case of Kuwait, while the relationship in Saudi Arabia exhibits significance, albeit with subtle nuances.

3.0 DATA AND METHODOLOGY

Utilizing data from Yahoo Finance, Boursa Kuwait, Central Bank of Kuwait (CBK), and the Saudi Arabian Monetary Authority (SAMA), we procured exchange rates, stock market prices, oil prices, and inflation rates for Kuwait and Saudi Arabia. The sampling period spans from January 2018 to February 2023, on a monthly basis, with USD serving as the base currency for consistency. Real exchange rates were computed using the formula:

$$\text{Real Exchange Rate} = \text{Nominal Exchange Rate}\left(\frac{\text{Foreign CPI}}{\text{Domestic CPI}}\right)$$

Meanwhile, the percentage change in stock index prices was determined using the formula:

$$\text{Stock Index Price} = \left(\frac{\text{Current Closing Price} - \text{Previous Closing Price}}{\text{Previous Closing Price}}\right) \times 100$$

In light of the dearth of research within our regional context, particularly in comparison to the seminal work of Hassanain (2017), a meticulous examination of their methodology was conducted to glean valuable insights. Notably, Hassanain's study predominantly relied on real exchange rates and oil prices as independent variables, with the stock market index serving as the dependent variable. Their data collection spanned from 2005 to 2015 on a monthly basis, conspicuously overlooking macroeconomic variables often deemed pivotal in elucidating stock market behavior. This methodological approach suggests a substantial reliance on the real exchange rate as a holistic gauge encompassing inflationary and interest rate dynamics, indicative of their focus on a specific set of determinants for stock market movements.

Furthermore, a comparative analysis was drawn with the research conducted by Pan *et al*., (2007), which similarly delved into the interface between exchange rates and stock market dynamics albeit within the context of East Asian countries. While exchange rates constituted a common variable, Pan *et al*., augmented their analysis by integrating nominal interest rates alongside external factors to assess the impact of capital flows on stock market indexes comprehensively. Of particular note, Pan's study adopted a daily data collection approach spanning from 1998 to 1998, in alignment with the recommendations of Chamberlain *et al*., (1997) and the insights of Griffin, Nardari, and Stulz (2004), advocating for the utilization of high-frequency data to effectively discern significant exchange rate exposures and associated market movements. This emphasis on daily data acquisition underscores the imperative of capturing transient fluctuations and subtle nuances in exchange rate dynamics, enhancing the granularity and accuracy of the analytical framework employed.

Aligned with these insights, our study will pivot around real exchange rates and stock market indexes as principal variables, complemented by factors influencing capital flows. The data collection endeavor will prioritize daily frequency, whenever feasible, aiming to augment the precision of our analysis. However, in instances where daily data is unavailable, a monthly basis will be embraced. This methodological choice is aimed at harnessing existing research frameworks while customizing methodologies to suit the distinctive dynamics of the Gulf Cooperation Council (GCC) region.

Regarding the analytical approach, we note the utilization of the Autoregressive Distributed Lag (ADL) model by Hassanain (2017) as an alternative to vector autoregression. This decision stemmed from the insignificance observed in the relationships analyzed through vector autoregression, coupled with the non-stationarity of both the stock index and oil price variables. Conversely, Pan *et al.*, (2007) employed Granger causality tests and Vector Autoregressive Analysis in their study. Notably, both papers integrated numerous robustness tests to fortify their findings against potential statistical biases. In a similar vein, our study will align with the most suitable methods following preliminary tests conducted on our data and variables. This adaptive approach ensures the robustness and validity of our analytical framework, thereby enhancing the credibility and rigor of our research outcomes.

4.0 Exchange Rate Policies in Kuwait and Saudi Arabia

4.1 An Overview of Exchange Rate Regimes

4.1.1 Kuwaiti Dinar (KWD) Exchange Rate System

The official currency of Kuwait is the Kuwaiti dinar (KWD), which was introduced in 1961 to replace the Gulf rupee at a rate of 1 dinar to 13.33 rupees. Governed by a controlled floating exchange rate regime, the value of the Kuwaiti dinar in relation to other currencies is determined by market supply and demand dynamics. Managed by the Central Bank of Kuwait (CBK), the Kuwaiti dinar holds considerable value, with one dinar approximately equivalent to $3.25 US dollars as of December 2023, positioning it among the world's most esteemed currencies. Figure 1 illustrates the fluctuation of Kuwait's exchange rate against the USD, underscoring the Kuwaiti dinar's status as one of the world's most valued currencies.

Kuwait's economic prosperity is significantly influenced by its abundant oil resources, solidifying its position as one of the globe's leading oil exporters. The wealth generated from oil production has contributed to the strength and stability of the Kuwaiti dinar over the years. Additionally, the Kuwait Investment Authority oversees a substantial sovereign wealth fund amassed by the Kuwaiti dinar, further bolstering the nation's economic prosperity.

Given its heavy reliance on oil extraction, Kuwait's economy remains closely intertwined with fluctuations in global oil markets. The continued demand for oil ensures sustained demand for Kuwaiti currency, bolstering its value in international exchange markets. Furthermore, Kuwait's economy benefits from the absence of taxes, which serves as a catalyst for economic growth and investment within the nation.

Figure 1: Kuwait's Exchange Rate against USD from Jan 2018 to Jun 2023
Sources: https://www.xe.com/currencycharts

4.1.2 Saudi Riyal (SAR) Exchange Rate System

Since 1952, Saudi Arabia has exclusively utilized the Saudi Riyal (SAR) as its official currency, denoted by the currency code SAR. Comprising 100 halalas, the Saudi Riyal is often symbolized by SR. The issuance and regulation of the Saudi Riyal fall under the jurisdiction of the Saudi Arabian Monetary Authority (SAMA), the country's central bank. Pegged to the U.S. dollar at a fixed rate of 3.75 riyals to a dollar since 1986, this exchange rate arrangement has facilitated a stable economic environment, fostering financial market development and ensuring confidence in the currency's value.

Figure 2 illustrates the exchange rate fluctuations between the Saudi Riyal and the USD from 2020 to 2022, offering insight into the currency's performance within the global exchange market. This fixed exchange rate regime underscores Saudi Arabia's commitment to maintaining stability in its currency and fostering an environment conducive to economic growth and development.

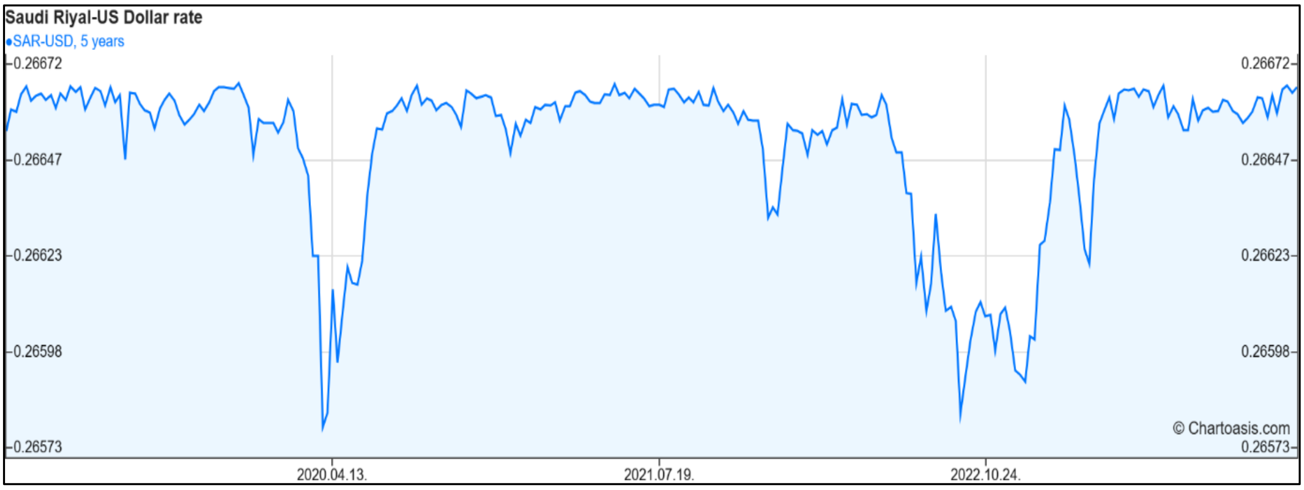

Figure 2: Exchange rate Saudi Riyal to USD from 2020 to 2022
Sources: https://www.chartoasis.com

4.2 Historical Evolution of Exchange Rate Policies

4.2.1 Kuwait's Currency Basket System

In contrast to the prevailing floating exchange rate systems adopted by most currencies globally, Kuwait has opted for a fixed exchange rate regime for its currency, the Kuwaiti Dinar (KWD). Unlike currencies pegged to a single currency like the U.S. dollar, the Kuwaiti Dinar's value is tied to a basket of currencies.

From March 18, 1975, until the end of 2002, the Central Bank of Kuwait implemented an exchange rate policy pegging the Kuwaiti Dinar to a carefully weighted basket comprising major currencies. This basket included currencies of nations with significant trade and financial ties with Kuwait, guiding the determination of the Kuwaiti Dinar's exchange rate.

This fixed exchange rate policy has demonstrated efficacy in fostering a high degree of relative stability for the Kuwaiti Dinar against major world currencies. While maintaining a fixed exchange rate offers advantages such as stability and shielding against abrupt fluctuations in currency value, it also necessitates a substantial reserve of foreign exchange to sustain the peg. Kuwait, bolstered by its substantial reserves of oil and U.S. dollars, possesses the resources necessary to effectively support its fixed exchange rate system, thus mitigating risks associated with currency volatility and bolstering investor confidence in the country's economic stability.

4.2.2 Saudi Arabia's Peg to the U.S. Dollar

The fixed exchange rate between the Saudi Riyal and the U.S. dollar has roots in the intricate historical relations between the two nations. The genesis of this arrangement can be traced back to the Arab-Israeli war in 1948-1949, during which the United States aligned with Israel, prompting Saudi Arabia to impose an oil embargo on the U.S. Subsequently, an agreement was reached between the two countries stipulating that the U.S. would purchase oil from Saudi Arabia. In return, Saudi Arabia would invest the proceeds in U.S. Treasuries, and furthermore, price its oil exclusively in U.S. dollars. This pact was accompanied by U.S. commitments to provide military assistance to Saudi Arabia.

Economically, pegging the Saudi Riyal to the U.S. dollar proved advantageous for Saudi Arabia, given the dollar-centric nature of its economy. This arrangement has been instrumental in supporting national economic growth in Saudi Arabia for over three decades. Moreover, maintaining the official exchange rate of 3.75 riyals to the dollar has served as a cornerstone of monetary and financial stability, providing a reliable anchor amidst economic fluctuations and uncertainties.

4.3 Policy Objectives and Considerations

4.3.1 Kuwait's Diversification Strategy

The Kuwaiti economy exhibits two significant structural imbalances, namely a heavy reliance on oil production and a pronounced dominance of public ownership. Over the years, Kuwait has grappled with the challenge of implementing a dual-focused development strategy aimed at mitigating these imbalances. This strategy revolves around diversifying the country's economic base away from its dependence on the oil sector while concurrently fostering the development of the private sector.

The heavy dependence on oil production poses inherent risks to the Kuwaiti economy, given the volatility of oil prices in the global market. Fluctuations in oil prices can significantly impact government revenues, fiscal stability, and overall economic performance. Moreover, the dominance of public ownership, particularly in key sectors of the economy, can impede innovation, efficiency, and competitiveness.

Efforts to diversify the economy away from oil entail initiatives aimed at developing non-oil sectors such as finance, manufacturing, tourism, and information technology. These endeavors seek to reduce the economy's vulnerability to oil price fluctuations and create new avenues for sustainable economic growth. Simultaneously, promoting private sector development involves fostering an enabling business environment, enhancing regulatory frameworks, facilitating access to financing, and promoting entrepreneurship.

Despite these efforts, challenges persist in achieving meaningful diversification and private sector growth. Structural barriers, bureaucratic hurdles, inadequate infrastructure, and limited access to finance continue to hinder progress. Addressing these challenges requires sustained policy reforms, investments in human capital, and enhanced collaboration between the public and private sectors. Through concerted efforts and strategic interventions, Kuwait aims to achieve a more balanced and resilient economy capable of weathering global economic uncertainties and fostering long-term prosperity.

4.3.1.1 Reduce oil-related activities

To mitigate its economy's heavy reliance on oil, the Kuwaiti government has initiated various measures and incentives aimed at diversifying economic activities away from the oil sector. One significant approach involves providing incentives to oil companies to encourage investment in alternative industries and technologies, which could help offset the anticipated revenue decline resulting from reduced oil activities. These incentives may include tax breaks, subsidies, and other financial incentives designed to stimulate investment and innovation in non-oil sectors.

Additionally, Kuwait has embarked on initiatives aimed at promoting environmental sustainability and reducing carbon emissions. One such initiative is the implementation of carbon tax policies, which impose levies on carbon emissions to incentivize companies to adopt cleaner and more sustainable practices. By internalizing the environmental costs associated with carbon emissions, carbon taxes encourage businesses to invest in cleaner technologies and reduce their carbon footprint.

Furthermore, Kuwait is actively promoting Environmental, Social, and Governance (ESG) reporting among businesses operating within its jurisdiction. ESG reporting involves disclosing information on a company's environmental, social, and governance practices and performance, allowing stakeholders to assess its sustainability and ethical practices. By encouraging ESG reporting, Kuwait aims to enhance transparency, accountability, and sustainability across its business landscape, fostering responsible corporate behavior and attracting socially conscious investors.

Moreover, Kuwait is championing the adoption and implementation of green technologies across various sectors of the economy. By investing in renewable energy sources, energy-efficient technologies, and sustainable infrastructure, Kuwait seeks to reduce its dependence on fossil fuels, mitigate environmental degradation, and promote long-term sustainability. These efforts align with global trends toward a greener and more sustainable economy, positioning Kuwait as a leader in environmental stewardship and innovation.

Additionally, Kuwait is undertaking awareness-raising initiatives to educate the public about the importance of reducing CO2 emissions and addressing environmental challenges. By raising awareness about the detrimental effects of carbon emissions on the environment and public health, Kuwait aims to foster a culture of environmental responsibility and encourage individuals and businesses to adopt sustainable practices. These awareness-raising efforts are crucial for building public support and mobilizing collective action to combat climate change and promote environmental sustainability.

Overall, Kuwait's multifaceted approach to reducing its economy's dependence on oil encompasses a range of incentives, policies, and initiatives aimed at promoting economic diversification, environmental sustainability, and social responsibility. By embracing these measures, Kuwait aims to build a more resilient, inclusive, and sustainable economy capable of meeting the challenges of the 21st century while safeguarding the well-being of its citizens and future generations.

4.3.1.2 Strengthening Private Sector

Although efforts have been made by authorities to address the structural imbalances in the Kuwaiti economy, there remains a lack of clarity regarding the potential interactions between various policy actions. Notably, the Ministry of Finance initiated amendments to the privatization law with the aim of lifting the ban on privatizing the oil industry, a significant development envisioned towards the latter part of the 2015-2020 development plan. Under this initiative, several public utilities and entities were earmarked for gradual privatization, including electricity and water services, storage and transportation facilities, management of public hospitals and schools, residential real estate, as well as postal and fixed telephone services. To oversee this privatization process and public-private partnership projects, the Kuwait Authority for Partnership Projects (KAPP) was established as a supervisory entity.

However, the endeavor to reduce the dominance of the public sector in the Kuwaiti economy has encountered complexities due to potential conflicts with other public policy objectives, particularly concerning the goal of ensuring secure employment for Kuwaiti nationals. Recognizing distortions in the labor market stemming from the overrepresentation of Kuwaiti nationals in the public sector, the medium-term plan acknowledged the need to implement policies aimed at encouraging private companies to hire Kuwaiti nationals.

In pursuit of this objective, the government introduced a system of cash allowances for national labor employed in the private sector. These allowances were designed to incentivize private sector employment among Kuwaiti nationals and were contingent upon factors such as educational attainment, marital status, and family size. Depending on these criteria, the monthly subsidy per Kuwaiti national employed in the private sector could amount to as much as $4,900, reflecting a significant financial incentive aimed at bolstering private sector employment among nationals across various industries and occupations.

4.3.2 Saudi Arabia's Economic Vision 2030

Saudi Arabia has articulated a multifaceted vision aimed at empowering its citizens and businesses to achieve their maximum potential, fostering economic diversification, promoting local content, and fostering innovation-driven growth opportunities. Central to this vision is the strategic utilization of both local and foreign investments, coupled with the concerted efforts to develop and unlock new sectors facilitated by the Public Investment Fund (PIF). The overarching goals of this vision are encapsulated within three primary pillars outlined in the 2030 Vision of Saudi Arabia: a vibrant society, a thriving economy, and an ambitious nation.

4.3.2.1 A Vibrant Society

Vision 2030 underscores the pivotal role of cultivating a resilient, content, and flourishing society as the bedrock for sustainable economic advancement. As such, it emphasizes the cultivation of robust societal foundations that embrace the tenets of contemporary Islam, foster a sense of national pride, celebrate Saudi heritage and cultural identity, and concurrently offer access to world-class entertainment amenities, promote sustainable living practices, and facilitate the provision of efficient health and social care systems. A tangible manifestation of this commitment is evident in the remarkable increase in healthcare coverage within Saudi Arabia, which surged from 84.13% in 2019 to an impressive 94% by the year 2022.

4.3.2.2 Thriving Economy

The Kingdom of Saudi Arabia is actively engaged in enhancing its business environment, undertaking significant strides such as the restructuring of economic cities, establishment of special economic zones, and deregulation of the energy market to enhance competitiveness. Furthermore, strategic investments are being made to nurture emerging sectors, alongside initiatives to privatize government services, all aimed at fostering economic diversification and ensuring long-term sustainability. An indicative measure of progress is the substantial rise in women's participation in the workforce, which surged from 19.4% in 2017 to 35.9% in the third quarter of 2023. Moreover, there has been a notable increase in the contribution of non-oil exports to non-oil GDP, climbing from 18.8% in 2016 to 25% by 2022. These developments underscore Saudi Arabia's concerted efforts towards bolstering economic resilience, fostering inclusivity, and reducing dependency on oil revenue.

4.3.2.3 Ambitious Nation

Saudi Arabia aspires to establish itself as a nation characterized by effective governance, transparency, and accountability, fostering an environment where all segments of society - including citizens, businesses, and non-profit organizations - actively participate in identifying and pursuing opportunities for collective advancement. Aligned with this vision, the Kingdom has set ambitious targets for the year 2030, encompassing various facets of socio-economic development:

- Mobilize one million volunteers annually, a substantial increase from 11,000 recorded in 2016.
- Elevate the nonprofit sector's contribution to GDP from less than 1% to a significant 5%.
- Enhance household savings as a proportion of total income from 6% to 10%, promoting greater financial resilience and stability among Saudi households.
- Elevate Saudi Arabia's E-Government Survey Index ranking from its current standing at 36th place to within the top 5 globally, underscoring the Kingdom's commitment to digital transformation and efficient public service delivery.
- Improve Saudi Arabia's Government Effectiveness Index ranking from 80th place to 20th place, reflecting strides in enhancing the efficiency and efficacy of governmental operations.
- Augment non-oil government revenue from its current level of over $43 billion to surpass $265 billion, indicative of efforts to diversify revenue sources and reduce dependence on oil-based income.

These targets signify Saudi Arabia's unwavering dedication to fostering holistic development, harnessing the collective efforts of its populace, and positioning itself as a global leader in governance, innovation, and sustainable growth.

5.0 Stock Market Performance in Kuwait and Saudi Arabia

5.1 Establishment and Growth of Stock Markets

Boursa Kuwait, established in 2014, serves as the operational entity behind the Kuwait Stock Exchange, operating since 2016 with a mandate to foster innovation, growth, and active participation in Kuwait's capital market. It plays a pivotal role in supporting the objectives outlined in Kuwait Vision 2035, contributing significantly to the development of the country's capital market and facilitating economic diversification initiatives. Central to its mission is the provision of support to the Capital Markets Authority and other relevant stakeholders in Kuwait's financial ecosystem.

A significant milestone in Boursa Kuwait's journey occurred with the initial public offering (IPO) of the Capital Markets Authority's 50% stake in the exchange, which was made available to Kuwaiti citizens. This IPO garnered substantial interest, evident in the oversubscription rate of 850 percent, underscoring the strong investor confidence in the exchange's potential. Notably, this event propelled Boursa Kuwait into the unique position of being the sole privately owned stock exchange in the Middle East. Subsequently, the privatization process reached its culmination in December 2019, marking a pivotal moment in the exchange's evolution.

Building upon this momentum, Boursa Kuwait successfully completed its privatization in September 2020, solidifying its status as one of Kuwait's most successful government-led privatization initiatives. The transition to private ownership reflects a strategic shift towards greater market efficiency, autonomy, and responsiveness to market dynamics. As a privately owned entity, Boursa Kuwait is poised to leverage its newfound independence to further enhance its operational efficiency, market integrity, and attractiveness to domestic and international investors alike.

The Saudi Exchange, established in March 2021, operates as a wholly owned subsidiary of the Saudi Tadawul Group, following the restructuring of the Saudi Stock Exchange (Tadawul) into a holding company. Positioned as Saudi Arabia's premier stock exchange and the largest in the Middle East, the Exchange facilitates the listing and trading of securities, catering to both local and international investors. Serving as the authoritative source of market information, the Saudi Exchange plays a pivotal role in advancing the long-term growth objectives of the Saudi Tadawul Group, while simultaneously offering a diverse array of investment opportunities to market participants.

Ranked as the 9th largest stock market among the 67 members of the World Federation of Exchanges, the Saudi Exchange holds a prominent position within the Gulf Cooperation Council (GCC) region. It stands as the dominant market in the GCC and ranks as the 3rd largest stock exchange among its emerging market counterparts. Furthermore, the Saudi Exchange maintains affiliations with esteemed regulatory bodies and organizations, including the International Organization of Securities Commissions (IOSCO), the World Federation of Exchanges (WFE), and the Arab Federation of Exchanges (AFE). These affiliations underscore the Exchange's commitment to upholding international standards of transparency, governance, and market integrity, while fostering collaboration and cooperation within the global financial community.

5.2 Performance Indicators - Stock Market Indices

The Boursa Kuwait Main Market 50 (BK Main 50) Index, a novel Market Capitalization Weighted Index, is set to include the top 50 most liquid firms listed on the Main Market. This index aims to provide a comprehensive representation of the performance of the most significant companies within the Kuwaiti capital market. Inclusions and exclusions for the BK Main 50 Index are determined based on the average daily traded value (ADTV), which is announced concurrently with the outcomes of the Boursa Kuwait Market Segmentation, typically released on the second Sunday of January each year.

The ADTV serves as a crucial metric for assessing liquidity and market activity, guiding the selection process for firms to be included or removed from the BK Main 50 Index. By incorporating the ADTV criterion, the index ensures that constituent firms are actively traded and reflect the prevailing market sentiment and investor interest.

As of December 2023, Kuwait's market capitalization reached a significant milestone, totaling 131.244 USD billion, marking an increase from the previous month's valuation of 128.017 USD billion. This upward trajectory underscores the resilience and dynamism of Kuwait's capital market, highlighting its capacity for growth and expansion in the face of evolving economic conditions and market dynamics.

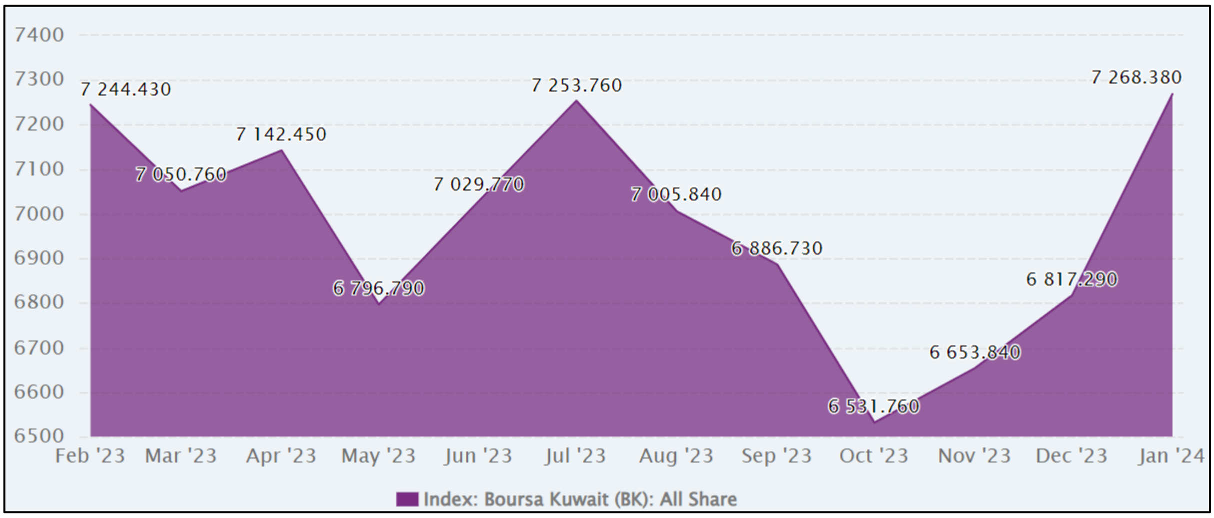

Figure 3: Kuwait's Equity Market Index from April 2018 to January 2024

Source: https://www.ceicdata.com/en/indicator/kuwait/equity-market-index

The Tadawul All Shares Index (TASI) serves as a pivotal benchmark for monitoring the collective performance of all companies listed on the Saudi Stock Exchange (Tadawul). This index, inaugurated in 1985 with a base value of 1000, has since been instrumental in gauging the overall health and trajectory of the Saudi Arabian equities market. Managed by the Capital Market Authority, the TASI encompasses a broad spectrum of publicly traded entities, offering investors and analysts comprehensive insights into the dynamics of the Saudi stock market.

Comprising 200 actively traded companies, the TASI reflects the diverse composition of the Saudi Stock Exchange, commonly referred to as Tadawul. Through its meticulous selection criteria, the TASI aims to capture the performance of a representative sample of companies spanning various sectors and industries, thereby providing a holistic perspective on market trends and investor sentiment.

According to the Saudi Exchange's (Tadawul) annual statistical report for the year 2023, the Tadawul All Share Index (TASI) registered a notable upsurge, reaching SAR 11.26 trillion ($3 billion) in total market capitalization. This figure represented a robust year-over-year increase of 13.98%, underscoring the resilience and growth potential of the Saudi equities market despite prevailing economic uncertainties and global challenges (Tadawul, 2024).

Tadawul, as a key player in the global financial landscape, maintains affiliations with prominent regulatory bodies such as the International Organization of Securities Commissions (IOSCO) and the World Federation of Exchanges (WFE). At the heart of Tadawul's operations lies the Tadawul All Shares Index (TASI), a vital barometer that encapsulates the collective performance of sectors listed on the Saudi Stock Exchange. By furnishing issuers and investors with a steady stream of reliable stock-related data, Tadawul aims to foster an environment conducive to the advancement of Saudi Arabia's capital market.

Aligned with the ambitious objectives outlined in Saudi Vision 2030, the Kingdom of Saudi Arabia is actively pursuing economic diversification across multiple sectors to mitigate its reliance on oil revenues. In this context, the pivotal role played by Tadawul assumes heightened significance, poised to bolster the Kingdom's economic resilience and growth trajectory. Facilitated investing and trading mechanisms within Tadawul, coupled with the listing of flagship Saudi entities like Aramco, have significantly enhanced liquidity within the Saudi Capital Market, positioning it as an attractive destination for domestic and international investors alike.

Looking ahead, the objectives set forth in the 2030 vision extend beyond mere market facilitation to encompass the development of the debt and derivatives markets. By fostering a robust ecosystem conducive to the expansion of these financial instruments, Tadawul aims to catalyze broader economic growth and financial inclusion, aligning seamlessly with the overarching goals of Saudi Vision 2030.

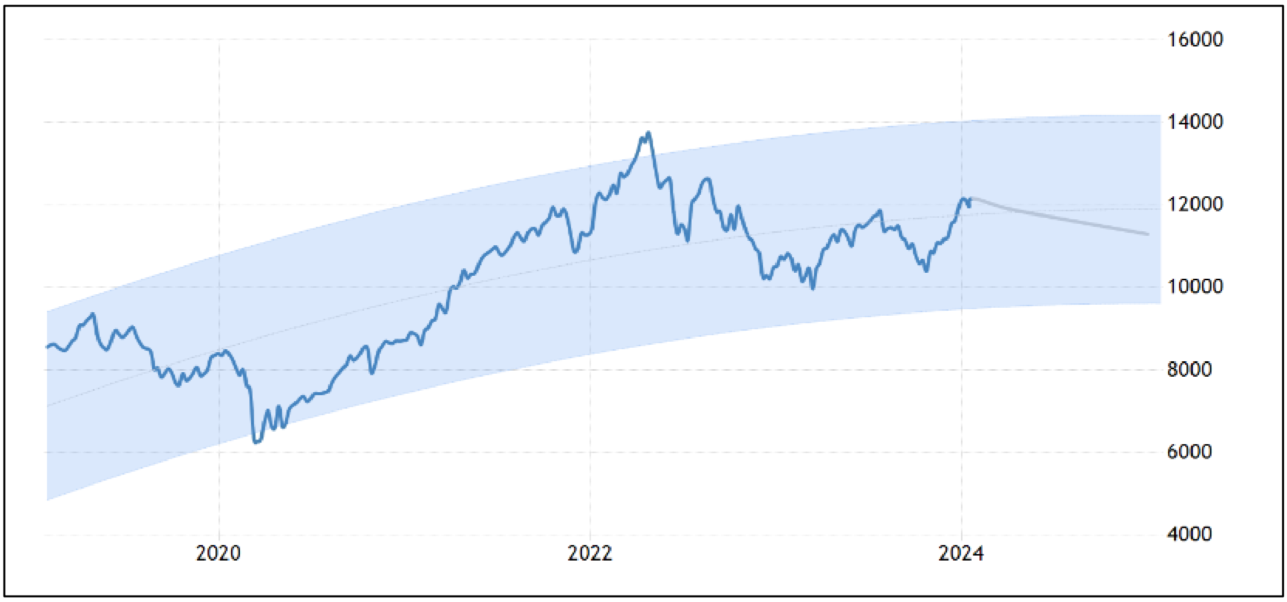

Figure 4: Tasi Index performance from January 2020 to January 2024
Source: Tadawul Stock Exchange

5.3 Macroeconomic Factors Influencing Stock Markets

5.3.1 GDP of Kuwait

According to data released by the World Bank, Kuwait's gross domestic product (GDP) stood at an estimated $175.36 billion in 2022, signifying a modest yet significant contribution of 0.08 percent to the global economy. The figure below illustrates the trajectory of Kuwait's GDP expansion spanning the years from 2014 to 2022. This representation underscores the steady growth trajectory observed in Kuwait's economic output over the specified period, reflecting the nation's ongoing efforts to bolster economic development and diversification. As a vital player in the regional and global economic landscape, Kuwait's GDP figures serve as a key indicator of its economic health and resilience in the face of evolving domestic and international dynamics.

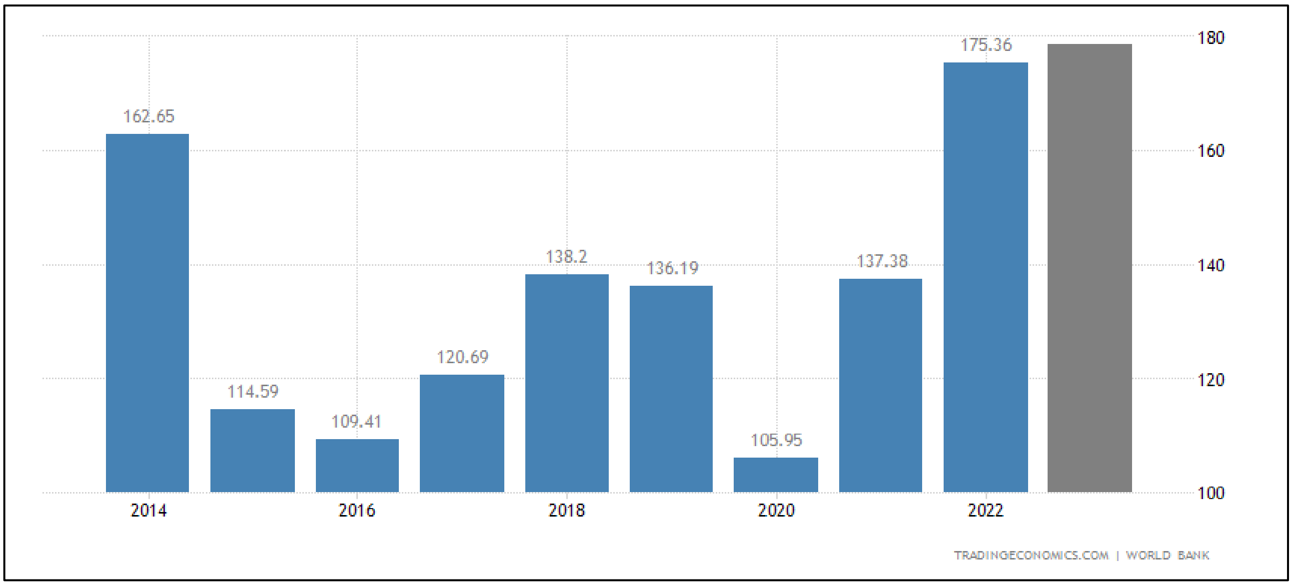

Figure 5: Gross Domestic Products of Kuwait from 2014 to 2022 (in USD Billion)
Source: Kuwait GDP (tradingeconomics.com)

The robust growth and development witnessed in Kuwait's gross domestic product (GDP) are anticipated to exert a positive influence on the expansion of the Kuwait Stock Market, evident in the upward trajectory of the Kuwait All Share index. As illustrated by the market performance data, in December 2023, Kuwait's market capitalization experienced a notable increase, reaching a value of $131.244 billion USD. This figure marks a substantial uptick from the previous month's valuation of $128.017 billion USD.

This surge in market capitalization aligns closely with the upward momentum observed in Kuwait's GDP, underscoring the symbiotic relationship between economic growth and stock market performance. The expansion of Kuwait's GDP serves as a fundamental driver of investor sentiment and market confidence, driving increased participation and capital inflows into the stock market. Consequently, the rise in market capitalization reflects the growing investor optimism and bullish outlook on the Kuwaiti economy, bolstered by its sustained economic development and favorable macroeconomic indicators.

Furthermore, the positive correlation between GDP expansion and stock market growth underscores the integral role played by economic fundamentals in shaping market dynamics. As Kuwait continues to chart a path of economic resilience and diversification, supported by strategic initiatives and reforms, the outlook for its stock market remains promising, with ample opportunities for investors to capitalize on the nation's burgeoning economic potential.

5.3.2 GDP of Saudi Arabia

The Gross Domestic Product (GDP) of Saudi Arabia stands as a pivotal variable in domestic macroeconomic assessments, providing a comprehensive measure of the nation's economic performance and overall health. Notably, the expansion of the private sector has emerged as a significant driver of economic growth, contributing to a notable uptick in the GDP of the non-oil sector. In recent years, the non-oil sector has experienced robust growth, with its GDP expanding by 3.3%, thereby accounting for 58% of Saudi Arabia's total GDP.

According to data from the World Bank, Saudi Arabia's GDP reached a value of 1108.57 billion US dollars in 2022, underscoring its substantial economic presence on the global stage. This figure represents approximately 0.48% of the world economy, highlighting Saudi Arabia's significance as a major player in the global economic landscape.

The steady expansion of Saudi Arabia's GDP reflects the nation's ongoing efforts to diversify its economy and reduce its reliance on oil revenues. By prioritizing the development of the non-oil sector, Saudi Arabia has sought to enhance economic resilience, foster sustainable growth, and mitigate vulnerabilities associated with oil price fluctuations. Moreover, the growing contribution of the non-oil sector to the overall GDP underscores the success of Saudi Arabia's economic diversification initiatives, positioning the nation for continued prosperity and resilience in the face of evolving global economic dynamics.

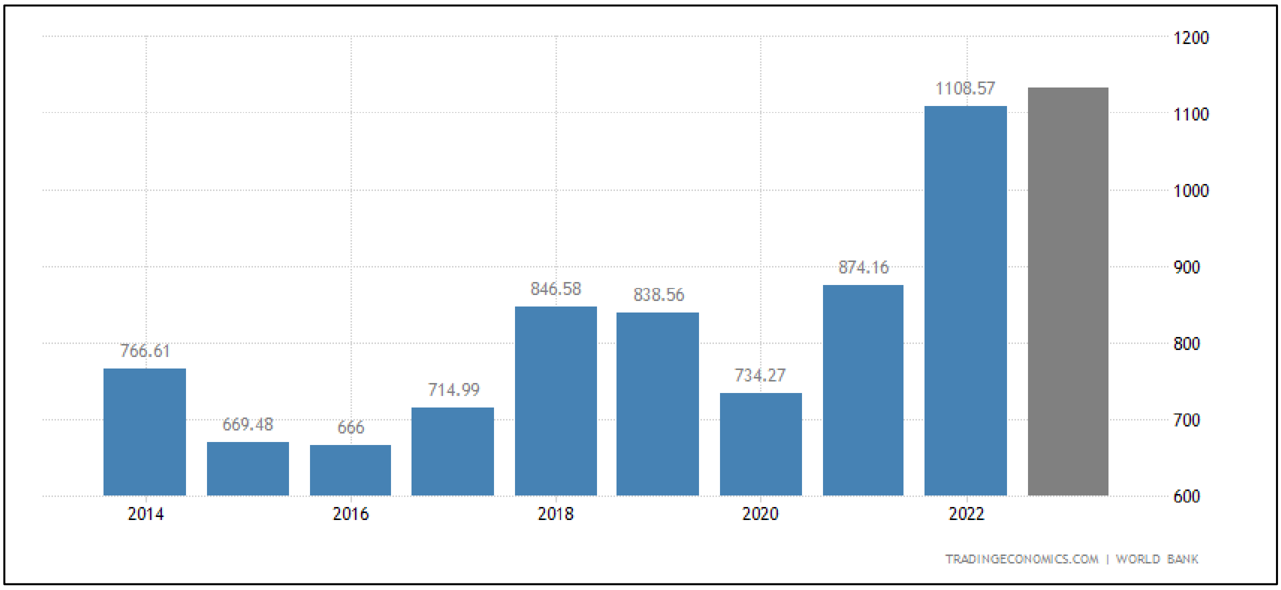

Figure 6: Gross Domestic Products of Saudi Arabia from 2014 to 2022 (in USD Billion)
Source: Saudi GDP (tradingeconomics.com)

According to the International Monetary Fund (IMF), the prevailing trends in the global oil market indicate a general weakness, which is expected to exert downward pressure on the oil sector. Conversely, there are projections suggesting an uptick in the development of the non-oil sector, largely attributed to heightened government expenditure. Against this backdrop, the Gross Domestic Product (GDP) of Saudi Arabia has witnessed significant dynamics.

Specifically, the expansion of the private sector has emerged as a pivotal driver of economic growth in Saudi Arabia. Notably, the GDP of the non-oil sector experienced a robust growth rate of 3.3%, marking a substantial increase. As a result, the non-oil sector now constitutes a significant portion, accounting for approximately 58% of Saudi Arabia's total GDP.

These developments underscore Saudi Arabia's strategic shift towards economic diversification, a key objective aimed at reducing dependency on oil revenues. By bolstering investment and fostering an environment conducive to private sector growth, the government has sought to enhance the resilience and sustainability of the economy. Moreover, the increasing contribution of the non-oil sector to the overall GDP reflects the success of Saudi Arabia's diversification efforts, positioning the nation for enhanced economic stability and long-term growth prospects.

6.0 FINDINGS AND DISCUSSION

As evident from the discussion in Section 4.0 concerning the exchange rate policies of Kuwait and Saudi Arabia, both nations have adopted a pegged exchange rate system, with Kuwait's currency tied to a basket of world currencies and Saudi Arabia's currency pegged to the US dollar. This pegging mechanism insulates their respective currencies from immediate fluctuations in the global economy.

An illustration of the resilience of these exchange rate policies can be observed during the COVID-19 pandemic period spanning from 2019 to 2020. Despite the unprecedented challenges posed by the pandemic, the stock indexes of both Kuwait and Saudi Arabia experienced a downturn for approximately two months, as depicted in Figure 7. However, noteworthy is the prompt recovery demonstrated by these indexes, rebounding to their pre-pandemic levels within a relatively short span of three months, notably by July. This rapid recuperation contrasts sharply with the struggles encountered by stock indexes in other countries, which have continued to grapple with achieving pre-pandemic levels.

The robustness of Kuwait and Saudi Arabia's exchange rate policies in weathering the economic turbulence induced by the pandemic underscores the stability afforded by their pegged exchange rate systems. Furthermore, it highlights the effectiveness of these policies in mitigating the adverse impacts of external shocks on their respective economies, thereby fostering resilience and facilitating a swift return to pre-crisis levels of economic activity.

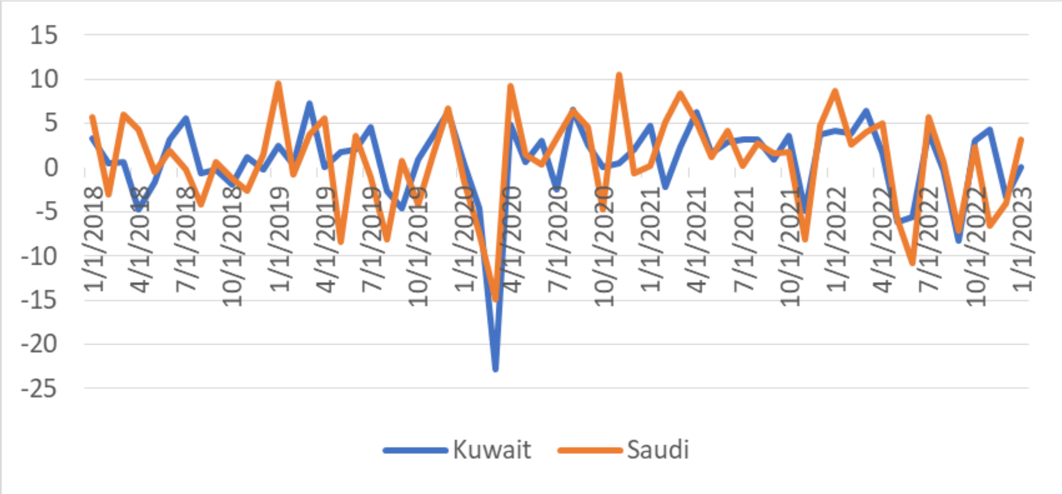

Figure 7: Month-on-Month Percentage Change in USD from January 2018 to December 2022 - Kuwait Stock Index (All Share) Vs Saudi Stock Index (TASI)
Source: Tadawul Stock Exchange

The graphical representation above illustrates the monthly percentage change observed in both the Kuwait Stock Index (KSI) and the Saudi Stock Index (SSI). The parallel movement of these two indexes is readily apparent, indicative of the striking similarity in their economic landscapes. Both Kuwait and Saudi Arabia rely heavily on revenues derived from the oil sector, a characteristic feature that shapes their economic profiles.

Moreover, both nations have articulated ambitious visions aimed at diversifying their economies and reducing dependence on oil revenues. Kuwait's concerted efforts towards privatization initiatives and Saudi Arabia's Vision 2030 exemplify these endeavors, signaling a collective aspiration towards broader economic contributions from non-oil sectors.

This evident synchrony in economic orientation is further reinforced by the calculated correlation coefficient between the two variables, yielding a value of 0.6269. This statistical measure underscores a notable degree of positive correlation between the Kuwait and Saudi stock indexes, indicating a tendency for their movements to align closely over time. Such a correlation underscores the shared economic dynamics and strategic objectives pursued by these Gulf nations, facilitating a convergence in their stock market performances.

7.0 CONCLUSION

This research endeavor embarks on a meticulous exploration of the intricate relationship between exchange rate policies and stock market dynamics within the unique contexts of Kuwait and Saudi Arabia, both prominent members of the Gulf Cooperation Council (GCC). By delving into the historical trajectories of their exchange rate regimes, this study aims to unravel the underlying motivations, policy objectives, and structural nuances that have influenced their monetary frameworks over time.

Additionally, the research endeavors to shed light on the fundamental characteristics of global stock indices, which serve as indispensable tools for assessing market performance and gauging investor sentiment. These indices, including but not limited to the Kuwait Stock Index (KSI) and the Saudi Tasi Index (TASI), are constructed through a standardized methodology grounded in weighted average mathematics. This ensures that they accurately reflect the collective movements of various market segments and provide a comprehensive snapshot of investment opportunities within their respective economies.

Moreover, an in-depth analysis of the exchange rate policies adopted by Kuwait and Saudi Arabia reveals a notable trend: both nations have opted to peg their currencies to major global currencies, with a predominant emphasis on the US dollar. This strategic decision underscores the pivotal role of the dollar as a key determinant of their exchange rate dynamics, thereby exerting a significant influence on their overall economic stability and external competitiveness.

Furthermore, the research uncovers a compelling correlation between the Kuwait Stock Index and the Saudi Tasi Index, indicative of a symbiotic relationship between these two financial markets. This finding not only corroborates existing literature but also underscores the interconnectedness of regional stock exchanges within the broader GCC framework. As such, it offers valuable insights into the potential spillover effects and transmission mechanisms that operate across borders, thereby enriching our understanding of the dynamics shaping the Gulf region's financial landscape.

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